DOCUMENT RESUME

ED 099 142 PS 007 642

AUTHOR	Thomas, Sharon E., Comp.
TITLE	Current Infant Research: An Abstract Bibliography. Catalog No. 123.
INSTITUTION	ERIC Clearinghouse on Early Childhood Education, Urbana, Ill.
SPONS AGENCY	National Inst. of Education (DHEW), Washington, D.C.; Office of Child Development (DHEW), Washington, D.C.
PUB DATE	Dec 74
NOTE	42p.
AVAILABLE FROM	Publications Office, I.R.E.C., College of Education, University of Illinois, 805 W. Pennsylvania Avenue, Urbana, Illinois 61801 (Catalog No. 123, $1.50)
EDRS PRICE	MF-$0.75 HC-$1.85 PLUS POSTAGE
DESCRIPTORS	*Bibliographies; *Child Development; Cognitive Development; Day Care Services; Developmental Psychology; Emotional Development; *Infancy; *Infant Behavior; *Infants; Intervention; Mental Retardation; Nutrition; Social Development

ABSTRACT

This selective bibliography cites ERIC documents describing research on infants. Entires are taken from "Research in Education (RIE)" and "Current Index to Journals in Education (CIJE)," 1972 through 1974. Descriptor (index) terms used to search the ERIC system include: Infants, Infancy, and Infant Behavior. (Author/CS)

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Current Infant Research: An Abstract Bibliography

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Available from:
Publications Office/IREC
College of Education/University of Illinois
805 West Pennsylvania Avenue
Urbana, Illinois 61801

Price: $1.50 Catalog #123

December 1974

PS 007642

The material in this publication was prepared pursuant to a contract with the National Institute of Education, U.S. Department of Health, Education and Welfare, partially supported by a contract with the Office of Child Development. Contractors undertaking such projects under government sponsorship are encouraged to express freely their judgement in professional and technical matters. Prior to publication, the manuscript was submitted to the Area Committee for Early Childhood Education at the University of Illinois for critical review and determination of professional competence. Points of view or opinions, however, do not necessarily represent official government position or policy, or the official views or opinions of the Area Committee.

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CURRENT INFANT RESEARCH: AN ABSTRACT BIBLIOGRAPHY

This selective bibliography cites ERIC documents describing some of the most recent research on infants. Entries included are taken from Research in Education (RIE) and Current Index to Journals in Education (CIJE) from the last two years.

Descriptor (index) terms used to search the ERIC system included: Infants, Infancy and Infant Behavior. Major descriptors (marked with an asterisk*) and minor descriptors appear after each RIE citation.

Most of the citations from RIE are available through the ERIC Document Reproduction Service (EDRS) in either microfiche (MF) or hard copy (HC), except where marked Microfiche Only. (See ordering directions in the back of this publication). If a publication is also available directly from other sources, availability information is listed below the abstract.

A few citations from RIE are not available through EDRS. Ordering information for these items is included with each citation. Articles cited from CIJE are available only in the journals as listed.

CURRENT INFANT RESEARCH: AN ABSTRACT BIBLIOGRAPHY

Research in Education (RIE)

1. Ainsworth, Mary D. Salter; Bell, Silvia M. Mother-Infant Interaction and the Development of Competence. 1972, 36p. ED 065 180.

Cognitive Development; Concept Formation; Environmental Influences; *Hypothesis Testing; *Infant Behavior; *Interaction Process Analysis; Interpersonal Competence; *Mothers; *Parent Child Relationship; Social Development

Several sets of evidence are offered to support the hypothesis that cognitive and social development are intimately interrelated, and that mother-infant interaction influences both. A mother's prompt responsiveness to her baby's signals tends to foster the development of varied and clear modes of communication and thus the development of one facet of social competence. Sensitive maternal responsiveness to infant signals, especially when combined with giving a baby freedom to explore his physical environment facilitates overall development of competence as measured by a general intelligence quotient. The quality of mother-infant interaction affects both the quality of a baby's attachment relationship with his mother and at least one important specific aspect of cognitive development, the development of the concept of the object. The concept of the balance between exploratory and attachment behavior is considered, and it is suggested that the significance of this is not so much quantitative as qualitative. That is, the significant individual differences lie not so much in the relative quantities of attachment and exploratory behavior as in the quality of each and the smoothness of transition from one to the other. Evidence is presented that the quality of mother-infant interaction influences the quality of the infant's attachment relationship to his mother, and that it also influences the level and the quality of exploratory behavior and play.

2. Carpenter, Genevieve C. Mother-Stranger Discrimination in the Early Weeks of Life. 1973, 9p. ED 080 167.

*Auditory Discrimination; *Discrimination Learning; Females; *Infant Behavior; Learning Processes; Mothers; *Perceptual Development; Response Mode; Technical Reports; *Visual Discrimination

A report is presented which relates to a general hypothesis suggested by previous data on visual response to faces that in the first weeks of life infants develop expectations regarding the human face. Three predictions were made: (1) silent human faces would elicit less direct regard than faces accompanied by voices; (2) a familiar face would

evoke more direct regard than the unfamiliar one; and (3) "matched" face-voice combinations would evoke more direct regard than "mismatched" combinations. To test these predictions, the ocular responses of 19 full-term normal female infants were observed once a week from age two weeks through seven weeks in a repeated measures design. Results indicate that the infants studied underwent very early learning.

3. Cataldo, Michael F.; Risley, Todd R. The Organization of Group Care Environments: The Infant Day Care Center. 1972, 18p. ED 078 909.

*Behavior Patterns; *Child Care; Day Care Services; *Infants; Interaction; *Interior Design; Physical Design Needs; *Physical Environment; Play; Staff Utilization; Technical Reports

In designing group day care for infants, special attention has been given to efficient care practices, so that all the children's health needs can be met and so that the staff will have ample time to interact with the children. One efficient method is to assign each staff member the responsibility of a particular area rather than a particular group of children. In the infant center several areas are utilitzed -- receiving, feeding, diapering, crib and play. All staff members are to interact with children in a large play area when not needed in their area. The center is one continuous open space separated only by low partitions, an arrangement that allows easy monitoring of all areas. Use of this design has posed some questions. One question was whether children would have trouble sleeping in an open center, since the sleep area would not be darkened or separated from the rest of the center. Studies comparing amounts of sleeping and crying in open, closed and open room conditions have shown that room conditions do not affect infants' sleep. Another question that arose was whether the use of an efficiently planned environment would result in staff spending more time with the children. It was found that as the number of staff in the play area increased, the percentage of time each spent interacting withthe children decreased. An experiment has shown, however, that if planned activitites are assigned to staff members, interaction is greater and there is less reduction in individual interaction as the number of staff in the area increases.

4. Coren, Stanley. The Measurement of Ocular Dominance in Infants. 1973, 11p. ED 078 948.

*Child Development; Comparative Analysis; *Eye Movements; *Infants; *Measurement Techniques; Speeches; *Tests

A simple test of ocular dominance in infants is described. In the test, a small point of light is gradually brought closer to the observer along the medial plane. As the light draws closer, in typical cases, one eye will cease to converge, or frequently, it will break from convergence suddenly. The eye which ceases converging or breaks away from the convergence is scored as the non-dominant eye. To determine if the test would be applicable to infants, a group of 68 ten-month-olds were tested. All children converged on the approaching light, and a scoreable uniocular cessation of convergence or sudden divergence were found in all cases. For comparison purposes, 62 nine-year-old children and 86 twenty-five-year-old adults were tested. Data from these tests appear to indicate that the convergence test does provide useable index of ocular dominance in infants.

5. Dennis, Wayne. Children of the Creche. 1973, 120p. ED 078 970.

Document not available from EDRS.

Adoption; Child Care Workers; Disadvantaged Environment; *Disadvantaged Youth; Early Experience; Educational Retardation; *Infants; *Institutional Environment; Institutionalized (Persons); *Intelligence Quotient; Mental Retardation; Personality Development; *Retarded Children; Sex Differences; Test Interpretation; Test Results

This book reports the experiential deprivation and intellectual retardation of children from the creche, a Lebanese social agency devoted to the care of foundlings from birth to 6 years. Begun in 1955, this study explored the role of environment, specifically, the effects of adoption, on IQ. Results showed that the mean IQ for both boys and girls after the first year of institutionalization was slightly above 50. It was found that, as a group, children adopted from the creche within the first 2 years of life overcame their initial retardation, reaching and maintaining a mean IQ of approximately 100. But children adopted after the age of 2 years did not overcome their preadoptive retardation indicating that experiential deprivation can have severe and enduring consequences.

Availability: Appleton-Century-Crofts, 440 Park Avenue South, New York, N.Y. 10016 ($7.95)

6. Dragsten, Susan S.; Lee, Lee C. Infants' Social Behavior in a Naturalistic vs. Experimental Setting. 15p. ED 086 366.

Available in microfiche only.

Age Differences; Behavior Development; *Day Care Programs; *Infants; Observation; *Social Behavior; Social Development

The effects of the familiarity of the setting and partner on the social behavior of infants was studied. Subjects were 22 infants 6-18 months old. Eleven of the infants were in a day care center; the remainder were cared for at home. In the first portion of the study, the day care infants were observed interacting with each other in the nursery setting. Later, an unfamiliar infant (not in day care) was paired with a day care infant and observed for 15 minutes three times at weekly intervals. All incidents of social behavior was recorded by an observer. A greater incidence of social behavior was observed in the familiar-unfamiliar pair. An exploration of novelty explanations was given for this finding.

7. Dunst, Carl J. A Resource Guide to the Very Early Treatment of Handicapped Infants. 1973, 25p. ED 082 395.

Curriculum Guides; *Exceptional Child Education; *Handicapped Children; *Infancy; Instructional Materials; *Intervention; Professional Education; Research Reviews (Publications; *Resource Guides

The resource guide to the early educational treatment of handicapped infants (from birth to 3 years) reviews research providing a rationale for early intervention, compares four common treatment models, examines approximately 40 global or specific curriculums, evaluates appropriate materials and toys, and notes three sources of information on personnel training. Research is reviewed which supports the value of early enrichment, the existence of critical periods for learning, and the lasting effects of early stimulation. Described are four models of infant education: center programs, tutorial programs, home-visit programs, and programs which train groups of parents in intervention techniques. Discussed are curriculum guides for deprived children, children with gross motor involvement, and children with visual and/or aural handicaps. Listed under materials are commercial companies and guides to making infant toys. Personnel training manuals for the various program models are evaluated. A bibliography lists approximately 130 references.

8. Durfee, Joan T.; Lee, Lee C. Infant-Infant Interaction in a Daycare Setting. 1973, 15p. ED 087 563.

Age Difference; Behavior Development; *Individual Differences; *Infants; *Interaction Process Analysis; Measurement; *Observation; Peer Relationship; *Social Behavior

The Infant-Infant Contact Code, developed to observe the social behavior in infants, is described. Results from using this scale with nine infants under nine months indicated that contacts between infants are complex in nature, that there are developmental changes in models of encounter, and that babies take different roles in relation to the contact. Differences between baby-adult and baby-baby interactions were noted. In baby-baby interactions, both social and non-social behaviors were present. With adults, the behaviors were social. It was suggested that the study of peer interactions during the first year of life may provide additional information about the development of social interaction.

9. Elardo, Richard. The Ecology of Infant Day Care. 1973, 29p. ED 082 827.

Behavior Change; *Child Care Workers; *Child Development; Classroom Arrangement; *Day Care Programs; Discipline; *Environmental Influences; *Infants; Language Development; Mental Development; Motor Development; Safety; Scheduling; Social Development; Teacher Behavior

This paper explores some of the attributed of quality day care programs for infants, age 0 to 30 months. High-quality interactions with adults result in positive developmental outcomes for infants. Adults involved in day care should focus on providing an environment of stimulating experiences, which help infants to develop satisfactorily. Other critical factors in adult behavior are values and attitudes, particularly interpretations of good and bad behavior, methods of discipline, use of materials, and the degree to which daily housekeeping chores interfere with constructive adult-infant interaction. Tips for teaching infants are provided along with an outline of appropriate developmental tasks for infancy. Important aspects of physical layouts for centers concern safety precautions and the division of the facility into interest areas. Daily schedules are discussed; strong organization and planning are stressed. Continuity of care is vital and may be facilitated by having few caregivers for each child, encouraging caregiver-parent communication, and maintaining a low level of staff turnover.

Also available from: Dr. Richard Elardo, Center for Early Development and Education, 814 Sherman, Littie Rock, Ark. 72202 (Free of Charge)

10. Foster, Martha; And Others. Visual Attention to Non-Contingent and Contingent Stimuli in Early Infancy. 1973, 10p. ED 086 335

*Attention; *Attention Control; *Behavior Patterns; Conditioning; Infant Behavior; *Infants; Measurement; Perceptual Development; Perceptual Motor Coordination; *Visual Stimuli

A total of 48 8- to 14-week-old infants were presented with a non-contingently moving visual stimulus and the infants's visual attention was measured. Infants who exhibited decrements in attention to the non-contingent stimulus showed recovery in attention when the same stimulus was made to move contingent upon a motor response. Moreover, visual attention was maintained as long as the stimulus moved contingently. The results are discussed in terms of different attentional values for non-contingent and contingent events as well as in terms of young infants' sensitivity to temporal periodicity of stimuli.

11. Friedman, Steven; And Others. Differential Dishabituation as a Function of Magnitude of Stimulus Discrepancy and Sex of the Newborn Infant. 1973, 12p. ED 078 927.

*Attention; *Infant Behavior; Infants; Response Mode; *Sex Differences; Stimulus Behavior; Technical Reports; Visual Discrimination; *Visual Perception; *Visual Stimuli

This study uses a habituation paradigm to systematically investigate the discrepancy hypothesis with male and female new borns. In addition, multiple visual response measures are used in monitoring the habituation process and the infant's response to various degrees of novelty. There were 36 apparently normal newborns (half of each sex) ranging in age from 28 to 82 hours. A target was placed against the inside of the infant's crib, and two observers stood behind it, facing the infant. Total looking time and number of looks were recorded. Non-glossy, black and white checkerboard targets in three sizes were used as visual stimuli. Each trial consisted of a 60-second exposure, and presentations continued until evidence of response decrement in looking time occurred. Each infant received one 60-second trial 5-10 seconds after the last decrement criterion trial. The hypothesis that infants are capable of demonstrating habituation to visual stimuli was supported. The findings also demonstrate that the visual response of female newborns is compatible with the discrepancy hypothesis. The response of females in this study is consistent with reports of sex differences indicating that the female newborn is generally more responsive and receptive to sensory stimulation than is the male. It is clear that effects attributable to sex cannot be explained effectively without reference to the context of stimulation. Filmed from best available copy.

12. Garber, Howard; Heber, Rick. The Milwaukee Project: Early Intervention as a Technique to Prevent Mental Retardation. 1973, 11p. ED 080 162.

Child Development; Community Programs; *Developmental Programs; *Disadvantaged Youth; *Infants; *Intervention; Measurement Instruments; Mothers; *Parent Education: Program Descriptions; Rehabilitation Programs

An intervention project concerned with the education of very young, disadvantaged children in an attempt to prevent intellectual deficits in "high-risk" children is presented. The intervention technique employs an intensive educational program for the very young high-risk child, beginning before six months of age. Using survey data, a maternal IQ was designated the basis for selection of a group of newborns. A two-phase program was initiated to prepare the mothers for employment opportunities and to improve their homemaking and child-rearing skills. An infant stimulation program was also implemented. The program was designed to facilitate intellectual development of very young children. It is concerned with (1) physical location which promotes learning, (2) a staff to manage and arrange instruction for children, and (3) the educational program. Development was assessed by an intensive schedule of measurement, including measures of physical maturation, standardized and experimental measures of developmental schedules of infant adaptive behavior, tests of general intelligence, an array of experimental learning tasks, measures of motivation and social development, and measures of language development. The success of this program requires and active community service program for which there is no previous model.

13. Golinkoff, Roberta Michnick. Semantic Development in Infants: The Concepts of Agent and Recipient. 1973, 13p. ED 078 897.

*Child Development; *Cognitive Development; Films, *Infants; *Language Development; Research Methodology; Technical Reports; *Visual Perception

Cognitive categories in infants that have relevance for linguistic development were investigated. "Agent" and "recipient," the categories chosen, are relational categories which by definition involve action. This experiment explored infants' (48 males, 14-24 months of age) sensitivity to certain "action parameters" of events. The question of whether infants could perceive the difference between agents and recipients was operationalized by comparing infants' visual fixation times to different experimental events presented on two color, silent motion picture films. These events were constructed to be more or less discrepant from an additional standard event appropriate to the content of each film. The different experimental events in the two films were

presented sequentially in the habituation paradigm. The agent-recipient dichotomy was contrasted by having real people and a table perform in filmed action sequences which represented three variation of the agent-recipient relationship. Data from the 48 subjects were analyzed in a four-factor analysis of variance using the difference scores between visual fixation time to the experimental event minus the visual fixation time to the preceding standard. The results indicated that only one agent-recipient reversal, the agent recipient reversal by direction, was watched more than the combined means of the agent-recipient reversal by position and the position-direction reversals.

14. Gratch, Gerald; And Others. Piaget's Stage IV Object Concept Error: Evidence of Forgetting or Object Conception? 1973, 17p. ED 075 083.

Concept Formation; Data Analysis; *Error Patterns; Hypothesis Testing; *Infant Behavior; *Memory; Technical Reports; Time Factors (Learning)

Piaget explains the stage IV error as a failure to assimilate the new place of hiding rather than a forgetting of it. His hypothesis predicts that the likelihood of error should not vary with the length of the delay interval. Nine-month-old infants delayed 0, 1, 3, or 7 seconds before having the opportunity to search. Infants in all conditions, save 0-seconds, were likely to err. While Piaget's hypothesis was not supported by the results of the 0-second condition, subsequent analyses of the data provided some support for Piaget's hypothesis.

Also available from: Gerald Gratch, Department of Psychology, University of Houston, Houston, Texas 77004

15. Holmes, Monica; And Others. The Impact of the Head Start Parent-Child Center Program on Parents. 1973, 340p. ED 088 598.

*Demonstration Programs; Family Programs; Federal Programs; Health Services; *Infants; Parent Attitudes; *Parent Education; Parent Influence; Parent Participation; Parent Role; Parent School Relationship; *Preschool Children; *Program Evaluation; School Community Relationship; Self Concept; Social Services

This document is the final report of the study of impact on parents of the Parent Child Centers (PCC) which are administered through Head Start, Office of Child Development (CCD). Designed for families whose incomes fall below the federally established poverty levels, the Parent-Child Center program focuses upon meeting the needs of children from the time of conception to age three, and the needs of their parents. The demonstration program explores the feasibility and outcome of having parents involved in a program with their children. This evaluative study of impact on parents centers around the program's primary objectives: to

have (1) impact on parenting skills and attitudes, (2) impact on the parents' sense of self esteem and feelings of control over their environment and personal destiny, (3) impact on the parents' knowledge and use of community resources, and (4) impact on the parents' use of health facilities and on their nutrition practices. Based on the findings presented it cannot be said that the PCC program as implemented had a profound effect on the majority of parents served, However, individual parents made some gains as a result of the program.

16. Hearings Before the Select Committee on Nutrition and Human Needs of the United States Senate, Ninety-Third Congress, First Session. Maternal, Fetal, and Infant Nutrition--1973. Part 1--Consequences of malnutrition; Part 2--Government Responses. Hearings Held Washington, D.C., June 5, 6, and 7, 1973. 1973, 210p. ED 083 352.

Biological Influences; Environmental Influences; Federal Program; Hunger; *Individual Development; Infancy; Infant Behavior; Infant Mortality; *Infants; Mental Development; *Mothers; *Nutrition; Physical Development; *Prenatal Influences; Scientific Research

Part one of these hearings before the Select Committee on Nutrition and Human Needs of the United States Senate includes the testimony of scientists and doctors engaged in research regarding the relationship between maternal, fetal, and infant nutrition and optimum mental and physical development of the child. In testimony it was shown that the effect of the mother's nutrition during pregnancy is of great importance to the birth weight and future health of the infant. Low-birth-weight babies are more susceptible to various health problems and enter the world with less of a chance. During the first year of life, the brain and other organs go through a vitally crucial stage of growth, and according to some of the previous testimony, malnourished infants may suffer irreversible mental and physical effects. Part two of these hearings include the testimony from representatives from the Department of Health, Education, and Welfare and the Department of Agriculture. The testimony concerns what these two federal agencies have done in the areas of research and actual nutritional services to mothers and infants. Appended materials include statements, letters, tables and various publications pertaining to the testimony. Parts of this document may not be clearly legible on microfiche due to the size of the print in the original. Pages 84-87 in part one and 173-88 in part two have been deleted for copyright reasons.

Availability: Superintendent of Document, U.S. Government Printing Office, Washington, D.C. 20402 (Part 1, Stock No. 5270-01998, $1.05; Part 2, Stock No. 5270-02010, $0.80)

17. Honig, Alice S.; Lally, J. Ronald. Assessing Teacher Behaviors with Infants in Day Care. 1973, 21p. ED 075 505.

Behavior Patterns; Classroom Observation Techniques; *Day Care Programs; *Educational Environment; Evaluation Techniques; Formative Evaluation; *Infants; Interaction Process Analysis; *Low Income Groups; Objectives; Rating Scales; *Teacher Behavior

The program of the Syracuse University Children's Center for the design and maintenance of an optimal living and learning environment for infants from 6 to 36 months from low-income families is presented. A checklist, assessing the behaviors of caregivers (ABC) was designed to gather evidence for the extent to which teaching staff actually provided the inputs which had been articulated as specific goals of the "infant-fold." The checklist contains 40 items divided into seven categories. Subjects were five caregivers working in the "infant-fold" during observation. The ABC scale is administered by an observer who tallies the behaviors of the subjects during several two-minute rating periods. As a formative evaluation technique, ABC is recommended for widespread use to monitor the quality of day care and educational programs for infants and to improve the quality of that input on a continuing basis.

18. Honig, Alice S.; Comp. Infant Education and Stimulation (Birth to 3 Years): A Bibliography. 1973, 60p. ED 081 499.

*Bibliographies; Child Care; Child Care Workers; Child Development; Day Care Programs; *Educational Research; *Educational Resources; Equipment; Evaluation; *Infants; Measurement; Physical Environment; Preschool Curriculum; Standards; Stimulation

This extensive bibliography (over 475 citations) provides references to programs and persons responsible for shaping ideas and practices relating to infant stimulation, education, and assessment of such efforts. The references are divided into six sections: (1) curricula for infant education programs, (2) materials for the education and training of caregivers and teachers of infants, (3) descriptions and research reports of infant stimulation and education projects or experiments, (4) monitoring infant development and education projects: testing and evaluation, (5) infant care and development references useful for back ground knowledge on infant care and education, and (6) toys, equipment, health and environmental characteristics and standards for optimal infant care settings.

Also available from: Publications Office/IREC, University of Illinois, College of Education, 805 W. Pennsylvania Ave., Urbana, IL 61801 (Catalog No. 1300-48, $1.80)

19. Honig, Alice S.; Lally, J. Ronald. Assessing the Behaviors of Caregivers, ABC-I and ABC-II. 1973, 11p. ED 081 480.

*Check Lists; *Child Care Workers; Evaluation Methods; Evaluation Techniques; *Infants; Interpersonal Relationship; Program Evaluation; Social Environment; *Teacher Behavior; *Teacher Evaluation

Two versions of the assessing the behavior of caregivers (ABC-I, ABC-II) rating checklist were developed. These instruments were designed to assess infant environments by studying actual ongoing behaviors, as opposed to idealized stated objectives of programs or psychometric criterion scores of infants. The checklists were created to (1) be brief, economical instruments, easy to apply in the classroom, with high interobserver reliability; (2) provide a means of assessing whether an infant program actually provides the inputs which have been articulated as specific program goals; and (3) provide a means of reliably monitoring infant programs, thereby insuring the maintenance of quality day care. ABC-I, a 40-item checklist, focuses on behavioral areas which reflect educational goals for infants under 18 months. ABC-II, designed for use with infants from 18 to 36 months, has 44 items representing age-appropriate developmental goals. Interobserver reliability is reported to be 84% and 88% for the two checklists based on a total of 34 hours of observation. Studies are listed which have used the instruments.

20. Horowitz, Frances Degen; And Others. An "Infant Control" Procedure for Studying Infant Visual Fixations. 1972, 4p. ED 065 177.

*Attention Span; Data Analysis; *Infant Behavior; Research; *Stimuli; *Testing; Test Results; Time; *Visual Stimuli

A study was conducted in which the infants' behavior was allowed to control stimulus duration. A group of five infants were tested once a week from 3 through 14 weeks of age. A second groups of five infants were tested once a week from 8 through 14 weeks of age. A third group of 18 infants were tested once at 3, 8, or 14 weeks of age. Once a stimulus was presented to an infant, it remained on until the two observers had simultaneously recorded no looking behavior for a continuous period of two seconds. Each of six checkerboard stimuli and the grey square were shown twice in two different orders. The longest looking time to a single stimulus recorded in this study was 1073 seconds, or 17 minutes. Looking durations of over 2 minutes were very common. On several occasions, durations of over 8 minutes were recorded. An analysis of the data was performed. The most important result of this study is the length of time an infant will spend looking at a stimulus in an experimental session. This suggests that it is possible to assess infant attentional patterns in chunks of long behavioral episodes.

21. Hunt, J. McVicker. Utility of Ordinal Scales Derived from Piaget's Observations. 1973, 15p. ED 082 854.

Cognitive Development; Cognitive Processes; Criterion Referenced Tests; *Developmental Psychology; *Early Childhood; *Infants; Intelligence; Norm Referenced Tests; *Psychological Evaluation; Psychological Studies; *Psychometrics

Arguments for the use of sequential ordinal scales in the observation of infants and young children are based on the tendency of traditional psychometric assessment to distract investigators from discerning structural and hierarchical aspects of development. Norm-referenced testing focuses on interindividual comparisons rather than developmental patterns. Mental age and IQ scores are often considered to be fixed quantities, and interpreted inappropriately in educational practice. Sequential ordinal scales, as originally suggested by Piaget, invite investigation of structural details. Their advantages are (1) the hypothetical sequential order permits direct testing of hypotheses of the sequential organization of development, (2) they allow for the examination of relationships between developmental patterns and environmental circumstances, (3) they provide means to test Piaget's hypothesis of six sensorimotor stages, (4) they disentangle development from the age variable, (which allows for study of the degree of plasticity in development, and relationships between cognitive competencies and affective conditions). The Uzgiris-Hunt scales, which contain six series based on behavioral landmarks of development, are described. Research literature in which the Uzgiris-Hunt scales have been used is reviewed to provide concrete examples of how ordinal scales facilitate investigation of early psychological development.

22. Johnson, Dale L.; And Others. The Houston Parent-Child Development Center: A Parent Education Program for Mexican-American Families. 1973, 19p. ED 086 320.

Child Development; *Compensatory Education Programs; Family Environment; Family Influence; *Infants; *Mexican Americans; Parent Child Relationship; *Parent Education; *Program Evaluation

The Houston Paren-Child Development Center (PCDC) is described. PCDC is similar to most compensatory education programs in its objectives, but different in process as it starts intervention during infancy and directs educational efforts at the parents. The program is open to low income Mexican-American families with at least one child under 3 years of age. The curriculum is taken from research on learning and child development. Communication and open feedback between the staff members and parents are emphasized. The program consists of In-Home, Family Workshops, and In-Center components. An evaluation design is described, involving longitudinal study of children, parents, and other program family members, as well as control group families. Data has been collected for 34 program families and 28 controls after one year, and 17 program and 17 control families after two years of the program. Measures of assessment include the Bayley Scales of Infant Development, Caldwell's Home Inventory, Maternal Interaction Structured Situation, Stanford Binet, and the Palmer Concept Formation Index. Analysis of Results is incomplete, but initial results seem to be positive.

23. Karmel, Bernard Z. Brain and Behavior Processing of Contrast Information by Human Infants: Spatial and Temporal Changes. 1972, 24p. ED 076 256.

Age Differences; *Cognitive Processes; Infant Behavior ; *Infants; *Neurological Organization; *Perceptual Development; Space Orientation; Speeches; Stimulus Behavior; Time; *Visual Perception

The purpose of this paper is to demonstrate that specific spatial and possibly temporal rates of change dominate early infants' looking, that these spatial and temporal events have meaningful and specific empirical correlates in neurophysiology as a function of age, and finally that neurophysiologically constrained models provide testable hypotheses for studies involving infant perceptual development. A model is presented for infant looking duration or pattern preferences depending upon transformation of spatial characteristics of visual stimuli by a developing visual system. It is shown how this model predicts the behavioral data obtained by the author and others and how these behavioral data are reflected in measures of infant brain responses. The inadequacies of a strictly spatial model which force one to incorporate temporal characteristics of stimulation are discussed.

24. Kreutzer, Mary Anne; Charlesworth, William R. Infants' Reactions to Different Expressions of Emotions. 1973, 31p. ED 078 914.

Child Development; Cognitive Development; *Emotional Response; *Infant Behavior; Infants; Recognition; *Response Mode; *Stimulus Behavior; Technical Reports; Visual Discrimination

Forty infants, 10 at 4, 6, 8, and 10 months, were confronted by an experimenter who acter out angry, happy, sad, and neutral facial expressions, accompanied with appropriate vocalizations. The infants' responses were recorded on video tape and rated for attention, negative and positive affect, and activity. Results indicate that the 4-month-old infants responsed indiscriminately to the various expressions, but the 6-month and older infants discriminated between the emotions with attention and negative affect behavior and in many cases responsed with the appropriate emotion. These results confirm, in part, earlier observations made by Darwin (1877) and Buhler & Hetzer (1928). The distinctive features of the experimenter's behavior which elicited the appropriate reactions from the infants were not determined.

25. Levine, Jacob. From the Infant's Smile to Mastery of Anxiety: The Developmental Role of Humor. 1972, 22p. ED 073 851.

Affective Behavior; Anxiety; *Cognitive Development; Communication (Thought Transfer); *Early Experience; *Humor; *Infancy; Psychological Needs; *Social Development

The smiles and laughter of an infant form the beginning of the developmental process of interpersonal interaction and socialization. The earliest smiles are automatic expressions of internal states, but soon infants' smiles are communications of pleasure. The developmental

changes in smiling and laughing in early infancy reflect the rapidity with which these emotional responses become important elements in the interactions between the infant and his social environment. The importance of smiling and laughter is demonstrated by clinical observations of their absence; distressed or frightened infants do not smile or laugh. Recent investigations point to humor as an essential component of the normal growth process. Humor provides the individual with the opportunity to re-experience the gratifications of cognitive and interpersonal mastery. An important determinant of children's humor responses is the degree to which the humor requires them to use their cognitive abilities maximally. Humor is conceptualized here as a reassertion of one's competence and its antithesis, anxiety, as a painful state of helplessness. Humor is frequently used to dispell anxiety; by secondary reinforcement humor becomes a learned motive to experience mastery in the face of anxiety -- the "whistling in the dark" phonomenon. Humor development parallels the stages of cognitive and psychosocial development. Humor is used to circumvent prohibitions, express agression indirectly, and can be used to facilitate learning.

26. Lewis, Michael. Infant Intelligence Tests: Their Use and Misuse. 1973, 19p. ED 078 075.

Child Development; Cognitive Development; *Infants; Intelligence; *Intelligence Tests; Intervention; Learning Experience; Literature Reviews; *Models; Predictive Ability (Testing); Test Results

Data from a variety of infant intelligence scores make clear that it is not possible to consider (1) that infant intelligence is a measurable, stable and unitary construct, (2) that there is a general G factor easily discernible in infancy, (3) that there is stability of scores both within and across scales, or (4) that there is predictability across age. These facts are discussed for their implications for models of intelligence, the use of intelligence tests in infancy, and finally intervention programs. It is concluded that the implicity model of general intelligence rests upon its function for society rather than its scientific merit. An alternative model of infant development is offered which is related to the acquisition of specific skills, the learning of which is dependent upon the match between the subject and the nature of the learning experience.

27. Lewis Michael; Ban, Peggy. Variance and Invariance in the Mother-Infant Interaction: A Cross-Cultural Study. 1973, 34p. ED 084 006.

*Child Care; Child Rearing; *Cross Cultural Studies; Cultural Awareness; Cultural Differences; *Cultural Environment; *Infants; Mothers; *Parent Child Relationship; Verbal Communication

This socument reports on a cross-cultural study of mother-infant interactions. Focus is on the issue of variance and invariance in these interactions across cultures. American and Yugoslavia mother-infant pairs were observed over long periods of time in a naturalistic setting. Also, available data on dutch, Zambian, and Sengalese mothers and infants were analyzed, so that five cultures were compared. Results indicated that there was considerable consistency in terms of the caregiving the infants received. This was discussed in relation to the invariances that exist across human cultures. Further discussion emphasized the danger of misinterpretation when behavior is studied out of context. To avoid this, it is necessary to be extremely familiar with the culture under study.

28. Lewis, Michael; Brooks-Gunn, Jeanne. Self, Other, and Fear: The Reaction of Infants to People. 1972, 29p. ED 067 169.

Bulletins; Child Development; *Cognitive Development; *Emotional Development; *Fear; *Infant Behavior; Infants; Interpersonal Relationship; Research; *Self Concept Tests; Sex Differences; *Social Development; Stimulus Behavior

Because of the sparcity of research on infants' response to social events, especially different categories of people, infants between 8 and 18 months of age were introduced to five different social events: strange adult male and female, strange 4-year-old female, mother, and self. The infants' responses indicated that approach affects stimulus differentiation (in terms of fear), while age affects level of response intensity. Strangeness of the social event was not sufficient to explain the results, and ethological and cognitive theories are discussed. It is suggested that the cognitive construct of self be introduced to explain the results. It appears reasonable to assume that by eight months the self as differentiated from other is well established, and some specific categories of self such as size, sex, or efficacy, may also be established.

29. Lewis, Michael; And Others. Mothers and Fathers, Girls and Boys: Attachment Behavior in the First Two Years of Life. 1972, 42p. ED 084 003.

Age Differences; *Cognitive Development; *Infant Behavior; *Longitudinal Studies; *Parent Child Relationship; Sequential Learning; Sex Differences; *Social Development

This longitudinal study examined the interrelationship between sex of the child and sex of the parent on the expression of attachment behaviors during the child's first 2 years. Special consideration was given developmental changes in the attachment structure and the relationship of attachment to cognitive development. Ten boys and 10 girls were seen at 1 and 2 years of age in a free play situation. At each age each infant first played with one parent and then a week later with the other. Attachment behavior (proximal and distal modes) was observed and found to be affected by the sex of the infant and sex of the parent. The Bayley Mental Maturity Index, obtained at age 2, was found to be correlated with certain patterns of attachment behavior over the first 2 years of life. These findings are discussed in terms of attachment theory and the etiology of sex differences in interpersonal relationships.

30. McCall, Robert B. Habituation and the Response to Discrepancy: Implications for Memory, Retrieval, and Processing Perceptual Information. 1972, 10p. ED 069 404.

*Adaptation Level Theory; Age Differences; Attention; Bibliographies; Cognitive Processes; *Conceptual Tempo; Individual Development; *Infant Behavior; Infants; *Memory; *Perceptual Development; Research Methodology; Sex Differences; Speeches; Stimulus Behavior; Technical Reports

Function of attention in infants is explored, assuming (1) that infants respond differently to novel situations than to familiar ones; (2) that the infant's pattern of response is a partial reflection of the process of acquiring a perceptual memory of the stimulus, and (3) that sex differences may occur in the rate of habituation. 120 infants either 12 or 18 weeks and received five presentations of a standard stimulus. After this, when the infant displayed a fixation of less than 3 seconds, the number of additional trials needed established their habituation criteria. Discrepancies of 0, 1, 2, or 3 arbitrary units were introduced on the next trial. Results indicate that while young infants took longer to habituate than older ones, they showed no differences in response to discrepancies. If a new stimulus is presented before habituation is complete, infants respond differently than they would otherwise do. Conclusions are (1) sex differences may reflect differences in maturation rates, (2) developmental processes during the first few months of life may influence memorizing more than using what is learned and, (3) infants may moderate discrepancies by ignoring those he is not ready to assimilate.

31. Moerk, Ernst L. Cognitive Development as Explored by Piaget and Its Impact on Language Development. 1973, 6p. ED 076 235.

*Cognitive Development; Cognitive Processes; *Infant Behavior; Infants; *Language Development; Preschool Learning; Speeches; *Verbal Development

The following are sketched in outline form: (1) functional atecedents and their implications for language -- assimilation, accommodation, circular reactions/feedback processes, classification, discrimination, functional equivalence, representation, transformation, communication; (2) semantic antecedents and their implications for language -- human beings, objects, qualifiers, casuality, space and time, expressive, directive and referential categories; and (3) structural antecedents and their implications for language -- elementary and complex schemas, nonverbal and vocal/verbal evidence is given for each principle listed under the three topics. No available in hard copy due to marginal legibility of original document.

32. Morgan, George A. Determinants of Infants' Reactions to Strangers. 1973, 25p. ED 080 193.

*Age Differences; *Child Development; *Infants; Parent Child Relationship; Reactive Behavior; *Stress Variables

This study investigated problems related to the consistency of infants' reactions to different strangers and unfamiliar behavior. Eight infants were studied in matched groups of eight boys and eight girls each at ages 4 1/2, 6 1/2, 8 1/2, 10 1/2, and 12 1/2 months. Three sets of measures of infants' reactions to strangers were collected from these sources: (1) interviews with mothers concerning their child's usual reaction to unfamiliar people, (2) laboratory observations of infant-stranger interactions, and (3) a follow-up questionnaire completed by the mothers. In the observation sessions, each infant was approached in a standardized manner by a male and female stranger, both while the baby was on the mother's lap and while he was at a feeding table four feet away from her. In each approach episode, the stranger systematically varied his behavior, moving from sitting silently across the room to picking up the infant. Results were analyzed and discussed in terms of differences between stranger episodes, consistency across stranger episodes, universality of fear of stranger, relationship between mothers' reports and direct observations, age trends, and stranger fear as a useful variable in development research.

33. Osofsky, Joy D.; Danzger, Barbara. Relationships Between Neonatal Characteristics and Mother-Infant Interaction. 1973, 19p. ED 086 323.

Behavior Development; *Behavior Patterns; Correlation; *Infants; Interviews Measurement; *Mothers; Observation; Parent Attitudes; *Parent Child Relationship; Parent Influence; *Social Development

A total of 51 mothers and their newborn infants were studied in order to evaluate the relationship between neonatal style and the early mother-infant relationship. The procedure included an infant assessment with the Brazelton Neonatal Assessment Scale, a interview concerning maternal attitudes and perceptions. The findings suggest that there are consistencies in infant state and behavioral measures across situations. The data also suggest consistent and interactive relationships between patterns of maternal stimulation and infant behavior in corresponding areas. For example, the attentive, sensitive mother tends to have a responsive baby and vice versa. The findings provide additional meaningful information about the early development of the complex relationship between children and parents.

54. Pedersen, Frank A.; And Others. Father Absence in Infancy. 1973, 11p. ED 085 088

Cognitive Development; Emotional Development; *Fatherless Family; *Infancy; *Infant Behavior; Negroes; *Parent Child Relationship; *Sex Differences; Social Development; Stimulation

This document reports a study investigating the effects of father absence on measures of cognitive, social, and motivational development in infancy. The sample included 54 black infants, 27 of whom were classified "father-absent." This classification was based on two indices, (1) a dichotomy of father-absent or father-present based on mother's responses to questions, and (2) a rating scale describing amount of father-infant interaction. Sixteen measures of infant functioning were analyzed for the study. The analysis indicated that for female infants there were no relationships between father variables and infant behavioral variables. For males, the following dependent variables were significant: Bayley Mental Developmental Index scores, a cluster from the Bayley Scales measuring social responsiveness, another cluster measuring Secondary Circular Reaction, and exploratory behavior as assessed in situational tests. It is speculated that one of the father's functions in infancy may be to provide stimulation that augments the primary caregiver's by introducing a degree of novelty. No explanations for the sex differences could be formulated. It is concluded that the results are tentative, and much observational research is needed.

55. Pederson, David R. The Soothing Effects of Vestibular Stimulation As Determined by Frequency and Direction of Rocking. 1973, 15p. ED 084 017

*Infant Behavior; *Infants; *Physical Development; Prenatal Influences; *Psychophysiology; *Sensory Experience

This study systematically investigated the influence of direction and frequency of rocking on the activity of two-month-old infants. Of the 84 subjects, 42 were males and 42 females. They were brought to the laboratory at least 2 hours after each feeding and placed supine in a bassinet. Rocking at 60 cycles per minute resulted in a greater reduction in activity than rocking at 45 cycles per minute. The direction of rocking (up and down, side to side, and head to toe) was not related to changes in activity. The finding that direction is unrelated to the soothing effects of rocking appears to be inconsistent with assumptions that rocking is soothing because it is similar to movements "in utero". The soothing effects produced by rocking and other forms of stimulation may be related to brain stem inhibitory mechanisms.

56. Roberts, Jean; Slaby, David. Prenatal-Postnatal Health Needs and Medical Care of Children, United States. 1973, 49p. ED 078 628

Childhood; *Exceptional Child Research; Handicapped Children; *Incidence; *Infancy; Medical Treatment; *National Surveys; Prenatal Influences; *Public Health

The report of the Health Examination Survey Program contained national estimates of infant health needs and the extent of prenatal and postnatal medical care received by 7,119 normal and handicapped children who were 6 to 11 years of age in 1963 through 1965. Children were chosen to be representative of American noninstitutionalized children with respect to age, sex, race, and region as well as other demographic and socioeconomic variables. Medical history data were obtained from a questionnaire completed by the parent. Principal findings included the following: more than 97% of mothers had some medical care during pregnancy; 3% of the children weighed less than 5 pounds at birth while 1% weighed more than 10 pounds; mothers of physically underdeveloped infants reported more medical problems during pregnancy; 8% (equally distributed between boys and girls) of the children had birth defects; 92% of the children were born in a hospital; 14% of the children had health problems during infancy of which 98% had the services of a physician; one third of the children were breast fed; and children in good health at the time of the survey were only slightly more likely to have been free of health problems during infancy.

Also available from: Superintendent of Documents, U. S. Government Printing Office, Washington, D. C. 20402 (Series 11 No. 125 $ .75)

37. Roeder, Lois M., Ed. The Effect of Maternal Nutrition on the Development of the Offspring: An International Symposium. Nutrition Reports International, Special Issue. 1973, 368p. ED 081 893.

Document not available from EDRS.

Dietetics; Environmental Influences; Hunger; *Individual Development; *Infancy; Infant Mortality; Laboratory Experiments; *Mothers; Neurological Defects; Neurological Organization; *Nutrition; Physical Development; Pregnancy; *Prenatal Influences; Rats

Contents of this symposium include the following papers: "Effect of Maternal Protein Malnutrition on Neonatal Lung Development and Mitochodrial Function," E.J. Hawrylewicz, J.Q. Kissane, W.H. Blaire and C.A. Heppner; "Effect of the Level of Nutrition on Rates of Cell Proliferation and of RNA and Protein Syntheses in the Rat," L.M. Roeder; "Protein Deficiency, Reproduction, and Hormonal Factors in Growth," M.R. Turner; "Reproductive Performance of Chronic Mildly Zinc Deficient Rats and the Effect on Behavior of their Offspring," D.F. Caldwell, D. Oberleas, and A.S. Prasad; "Effects of Growth Hormone and Pituitary Extract on Behavioral Abnormalities in Offspring of Undernourished Rats," M. Simonson, Et. Al.; "Neonatal Metabolism," C.J. Lee; "Effect on Rat Offspring of a Maternal Diet Deficient in Calories but Not in Protein," A.A. Rider and M. Simonson; "Prenatal Nutritional Factors Affecting Brain Development," S. Zamenhof, Et. Al.; "Adaptations in the Metabolism of Protein During Pregnancy and Their Nutritional Implication," D.J. Naismith; "The Developing Brain...," J. Dobbing; "Pre- and Postnatal Malnutrition and Responses to Infection," P.M. Newberne and B.M. Gebhardt; "Persistent Effects of Maternal Protein Deficiency in Postnatal Rats," F.J. Zeman Et. Al.; "Perinatal Undernutrition and the Metabolic and Behavioral Development of the Offspring," A.M. Hsueh Et. Al.; and Others.

Availability: Geron-X, Inc., Publishers, Box 1108, Los Altos, Calif. 94022 ($8.00)

38. Rosenbluth, Lucille; and Others. New York City Infant Day Care Study. 1973, 10p. ED 084 015.

Cognitive Development; *Day Care Programs; *Early Experience; Emotional Development; *nvironmental Influences; *Infants; Interagency Cooperation; *Longitudinal Studies; Parent Child Relationship; Physical Development; Social Development

A 5-year longitudinal study of infant day care programs in New York City is described. Emphasis is on the effects of day care on the child and family, particularly with regard to mother-infant separation. The study is large scale (involving 550 children and families), and it focuses on service-oriented programs that have been developed in the past few

years by many participating agencies. Three groups are being studied: (1) children in group day care centers, (2) children in family day care centers, and (3) home reared children. Data is largely based on systematic, naturalistic observations, although many tests of cognitive, emotional-social, and physical development are being used as outcome measures. Instruments to indicate effects on families are also being administered. Some cross-sectional analysis will be made, so that early versus late entry comparisons can be included. The project stresses the acceptance and cooperation of each of the participating agencies and parents involved; the steps taken to insure these attitudes are described.

39. Rosenfeld, Howard M. Time Series Analysis of Mother-Infant Interaction. 1973, 24p. ED 089 842.

Behavioral Science Research; Developmental Psychology; *Infants; *Measurement; *Observation, *Parent Child Relationship; Reinforcement; *Research Methodology; Socialization; Video Tape Recordings

A method of studying attachment behavior in infants was devised using time series and time sequence analyses. Time series analysis refers to relationships between events coded over adjacent fixed-time units. Time sequence analysis refers to the distribution of exact times at which particular events happen. Using these techniques, multivariate configurations of mother and infant behavior associated within the across time intervals were identified. Mother-infant interactions were videotaped and the behavior coded. The purpose of the development of these methodologies was to predict behavior changes in the context of attachment behavior.

40. Rubin, Lawrence S. Early Childhood Health--Mental Health Prevention and Treatment Program. 1973, 7p. ED 085 117.

Counseling; *Health Services; *Infants; *Mental Health Programs; Parent Education; *Preschool Programs; *Prevention

The Maimonides Early Childhood Health-Mental Health Prevention and Treatment Program is described. The program provides a broad range of preventive services to children who are five years of age and younger. Services are organized into Post-Natal and Pre-School Programs. The Post-Natal Program offers group education and counseling, individual psychiatric counseling, parent education groups, pediatric examinations for medical status, visual problems, deafness, neurological examinations, laboratory tests for inborn errors of metabolism, and home visits. The Pre-School Program provides examinations for medical, visual problems, deafness, group neurological examinations, developmental screenings, psychological testing, counseling, and parent education groups.

41. Rudeen, Scott; And Others. The Prenatal, Perinatal, and Postnatal Status of Children in Idaho. Volume I. 1973, 132p. ED 076 240.

Child Abuse; Child Care; *Child Development; Emotional Development; *Environmental Influences; Infant Behavior; *Infants; Mental Retardation; Motor Development; Nutrition; Population Growth; *Pregnancy; *Prenatal Influences; Social Factors; Technical Reports

This report attempts to identify the relevant environmental factors which have an impact upon the quality of life of the child. The following are discussed: (1) introduction--population growth, population growth and natural resource reserves, GNP and the quality of life, regulation of population size, population quality; (2) prenatal consideration -- prenatal supervision and care, nutrition, placental abnormalities, intrauterine infections, drugs, maternal disease, environmental stress, subpopulations, physicians suggest improvements for consumers and systems, public service vendors; (3) perinatal and postnatal considerations--labor and delivery, neonatal period (risk factors, prediction impairment), social considerations during infancy (illegitimacy and its consequences, parental deprivation, abuse and neglect, other influences upon emotional and social development), prelinguistic development and influencing factors, motor development and related factors, nutrition, the service pattern and physicians' comments, and public vendors.

42. Saunders, Minta M. Some Aspects of the Effects of Day Care on Infants' Emotional and Personality Development. 1972, 123p. ED 067 166.

Behavior Development; *Child Development; Comparative Analysis; *Day Care Services; Doctoral Theses; *Emotional Development; Family Environment; Group Experience; Infant Behavior; *Infants; Parent Child Relationship; *Personality Development

To identify any differences in emotional/personality development of a group of infants reared at home and a matched groups of infants enrolled in a day care center, data were obtained on behaviors of two groups of infants. The sample consisted of 15 demographically matched pairs of infants, ages 3-24 months at entrance. Data were collected through observations, questionnaires, administration of the Bayley Scales of Infant Development, and monthly telephone interviews with mothers. Five measures of emotional and personality development were used to assess the two groups: reaction to stranger, patterning, separation from mother, exploratory behavior, and eating and sleeping patterns. No significant differences were found between the home and center groups. However, since day care services are growing rapidly, it is clear that more research is needed to: (1) understand the complexity of the acquisition of attachment, which is crucial to development; (2) analyze the components of contingent responding; and (3) provide more detailed and definitive analyses of care-giving situations so the results may be incorporated in training techniques.

43. Serafica, Felicisima C. Effects of Illumination on Attachment Behaviors in a Novel Environment. 1973, 11p. ED 089 885.

Behavioral Science Research; *Behavior Development; Child Development; *Environmental Influences; Infant Behavior; *Infants; *Lighting; *Parent Child Relationship

This study analyzes the effects of one environmental property, illumination, as part of a general program to isolate differential effects of specific properties of the novel environment on attachment behaviors in infants and young children. Attachment is operationalized into two response classes: (1) proximity to the mother, and (2) contact with her. Twenty female infants within each of 5 age groups (between 8 and 24 months) were randomly assigned to one of two experimental groups who were exposed to novel environments with high or low levels of illumination. Within each condition, subjects were observed in a series of six 3-minute episodes presented in a standard order for all infants. Analysis of results indicates that illumination does influence attachment behaviors, with the direction of the effect varying the type of attachment behavior involved. Discussion focuses on various theoretical interpretations of the data.

44. Shaffran, Ruth; Decarie, Therese Gouin. Short Term Stability of Infants' Responses to Strangers. 1973, 19p. ED 080 143.

*Behavior Development; Behavior Rating Scales; Cognitive Development; Emotional Development; *Home Visits; *Infant Behavior; Observation; Perceptual Development; *Response Mode; Social Behavior

An investigation of the short term stability of infants' responses to strangers was conducted. Subjects were 60 randomly chosen full-term family-reared infants, 30 boys and 30 girls, selected to fit into three age groups of 8, 10 and 12 months. The experimental design was such that the order of first, second, and third visits was counter-balanced between experimenters. During the meeting, the subject, who was at his feeding table, was observed for facial expression, visual and vocal behavior, as well as his gestures and movements. Every action and expression was scored as positive, negative, or undifferentiated. Results indicate that the majority of the children at the ages investigated have achieved the perceptual, cognitive, and emotional ability to respond differentially to various individuals, and to respond negatively under certain conditions.

45. Cimmons, M. Patricia. Piagetian Theory on Imitative Behavior in Childhood: Direction for Parent-Infant Education. 1973, 14p. ED 075 091.

*Handicapped Children; Home Programs; *Imitation; Infant Behavior; *Infants; *Intervention; Observational Learning; *Parent Education; Preschool Education; Program Descriptions; Special Education; Stimulus Behavior

Piagetian theory provides direction and support for an early identification, early intervention focus for special education of handicapped children. This focus includes guidance and training for parent and child to enhance their relationship and to facilitate the child's movementthrough normal developmental

sequences in sensory-motor, cognitive, linguistic, and social areas. Piaget's sequence of stages in development of imitative behavior is especially important and for parent-infant education: (1) reflective or contagious imitation -- 0 to 1 month; (2) intentional sporadic imitation -- 1 to 3 moths; (3) intentional systematic imitation of sounds and movements within child's repertoire -- 3 to 8 months; (4) imitation of movements within child's repertoire which he cannot observe himself performing (coordination of elements) -- 8 to 10 months -- and beginnings of imitation of new auditory and visual-motor models -- 10 to 11 months; (5) systematic imitation of new auditory and visual-motor models -- 12 to 15 months; and (6) deferred imitation and beginnings of representational imitation (internalized coordination precedes external manifestation) -- 15 to 17 months. Pseudo or elicited imitation can be effectively implemented with very young exceptional infants and children. Care must be taken to guide parents and teachers in "natural" intervention techniques that do not strain parents or child. Home demonstration should begin early and continue until the child is ready for school. Models for imitation must be consistent with the child's capabilities and experiences and should build upon them.

46. Soule, Bradley; And Others. Clinical Implications of the Brazelton Scale. 1973, 10p. ED 080 165.

Behavior Patterns; *Behavior Rating Scales; *Clinical Diagnosis; *Drug Addiction; *Infant Behavior; Perceptual Development; Stimulus Behavior; Technical Reports

An exploration of the clinical usefulness of the Brazelton Neonatal Behavioral Scale was made. A specific pediatric problem was studied, i.e., a baby born to a heroin-addicted mother taking methadone. The control sample was a population of 41 babies who were part of a larger study. Both methadone and control infants were tested between 48 and 72 hours of age by one of three examiners. Results are given. It is concluded that the scale is reliable as an index of neonatal behavior variations in a group of sick infants and as a means of following the course of a sick infant over hours and days. Further research is recommended.

47. Strain, Barbara; Vietze, Peter M. Monitoring Attention During Operant Conditioning in Six and Seven Month Old Infants. 1973, 10p. ED 086 336.

*Attention; Feedback; Infant Behavior; *Infants; Learning Processes; Measurement; *Operant Conditioning; *Reinforcers; *Visual Stimuli

The purpose of the present study was to investigate more directly the effects of content and repetition of contingent visual feedback on a discrete operant pulling response and accompanying visual attention in 24 six- to seven-month old infants. Simultaneous recording was made of infant operant behavior and visual attention. Results indicated significant learning as reflected in the looking-and-pulling measure across ten-minute sessions. In addition,

increased responding was shown to faces as compared to the other feedback conditions. The results emphasized the need for incorporating systematic observation and analysis of visual attention in operant learning studies using visual reinforcement.

48. Vietze, Peter; And Others. Extended Infant Learning: A Comparison of Two Responses and Two Visual Reinforcers. 1973, 13p. ED 080 157.

*Cognitive Development; *Infant Behavior; *Learning Processes; *Reinforcement; Response Mode; Stimulus Behavior; Technical Reports; Time Factors (Learning); Visual Stimuli

A study was conducted to examine the situational generality of extended learning in early infancy. Subjects were 17 infants within one week of eight weeks of age. All but two were caucasian, and all were from middle-income families. The apparatus consisted of a pressure sensing pillow which, when placed under the infant's head or feet, was sensitive to small pressure changes produced by movement. An electronic control system operated 15 rpm hurst motor or a 25 watt red light bulb when the infant activated the pillow by his movement. Subjects were placed in cribs with their head or feet on the pillow so that when they moved, a counter was advanced and contingent stimulation was provided. A repeated measures analysis of variance of the baseline data for the first, seventh, and last days of the study indicated no significant change in response rate across the 14-day period. Results indicate that the major increase in response output over a two-week period of conditioning occurs during the first seven days, with attainment of asymptotic level of responding over the last seven days. Not available in hard copy due to marginal legibility of original document.

49. Wachs, Theodore D. Utilization of a Piagetian Approach in the Investigation of Early Experience Effects: A Research Strategy and Some Illustrative Data. 1973, 33p. ED 087 562.

*Cognitive Development; *Early Experience; *Infants; Intellectual Development; *Literature Reviews; *Measurement; Observation; Research Methodology; Research Needs

Following a review of research on the effects of early experience upon subsequent cognitive and intellectual development, an alternative Piagetian-based strategy for the study and evaluation of these concerns is presented. Using this paradign, infants were observed naturalistically for one year. The observations were coded according to the four categories of the Purdue Home Stimulation Scale. Infants were also tested on the Uzgiris-Hunt Infant scales. Results of correlations between these two instruments are presented and discussed, although data analyses are preliminary.

50. Weir, Mary Knox. Caregiver Language Observation Instrument. Manual of Instructions and definitions. 1974, 9p. ED 084 304.

*Child Care Workers; Day Care Services; Environment; Evaluation Techniques; *Expressive Language; *Infant Behavior; *Instrumentation; Language; *Observation

This manual describes the caregiver language observation instrument, a device useful for observing the language behavior of caregivers in infant day care settings. Eleven categories of language behavior are recorded: approval, disapproval, cautioning, soothing, talking to, questioning, labeling, elaborating, singing, directing, and imitating. The instrument also provides for data collection on the state of the child and the situation in which the child is functioning when the caregiver's language is observed. This manual provides instruction in the observation technique, the coding system, and a copy of the measure.

Also available from: Mary Knox Weir, University of Illinois, Division of Child Development and Family Relations, Urbana, Ill. 61801

51. Wiener, Gerald; And Others. New Orleans Parent Child Development Center. 1973, 33p. ED 080 206.

Disadvantaged Groups; Home Visits; *Infants; *Intervention; *Mothers; Negative Reinforcement; *Parent Child Relationship; *Parent Education; Parent Participation; Parent Workshops; Positive Reinforcement

The New Orleans model for parent-infant education involves the use of non-professional workers, trained by professional staff, who teach general concepts of child development and child management to groups of disadvantaged mothers. Two themes are stressed: the parent is now and will be the child's most important teacher, and all the baby's time is learning time. In the long range view, research at the parent child center is designed to investigate whether or not educational intervention needs to be implemented from the first year of life for optimal success and also to evaluate two systems of delivering services (in a center versus home visits). Results are as yet unconclusive.

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